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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,693	03/18/2004	S. Brandon Keller	200311777-1	7814

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EXAMINER

KIK, PHALLAKA

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/803,693	<b>Applicant(s)</b> KELLER ET AL.	
	<b>Examiner</b> Phallaka Kik	<b>Art Unit</b> 2825	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action responds to Applicant's amendment filed on 6/27/2006. Claims 1-33 are pending, wherein claims 1-2,7,9,12-13,20,2-28,31,33 have been amended. Claims 1-33 have been examined and are newly rejected as being necessitated by Applicant's amendment.

#### ***Claim Objections***

2. **Claims 1-33** are objected to because of the following informalities:

As per **claims 1,7,12,20,26,31**, "may be" (lines 14, 13, 17, 13, 18, 15, respectively) should be --are-- to clearly define what is being claimed. In addition, it is not clear that the "instantiations of the child blocks are [may be] rotated with respect to one another", being rotated in the hierarchical design or in the flattened design. For examination purposes, it is assumed to be at the hierarchical design.

As per **claims 2-6,8-11,13-19,21-25,27-30,32-33**, the claims are objected to for incorporating the above errors into the respective claims by claim dependency.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-33** are rejected under 35 U.S.C. 102(b) as being anticipated by **Ellis et al.** (U.S. Patent No. 5,831,869).

As per **claims 1,7-9,12,20-21,25-26,31-33**, all of the elements of the claims are illustrated in Fig. 5, wherein the particular block(s) are identified at steps 102 and 120, wherein the RC information are loaded at step 106, wherein the flat representation is written at step 124 which include all of the instantiation of the lower blocks (i.e., by combining the design files created in steps 104, 108 for the lower blocks, into the design file for higher block(s) created at steps 122-124) (see also col. 8, lines 19-65); wherein the second analysis tool is at least the timing analysis tool for which the design file(s) are accessible; wherein since the orientation or rotation of the child blocks with respect to one another, do not affect the information being extracted, such orientation or rotation of the child block can be in any rotation, and further since the claims also do not specify that the child blocks must be rotated, no rotation also would meet the language of the claims; wherein the computer readable medium operable with a computer, containing computer-executable instructions for implementing the method, the system, and the means associated with the system are part of the EDA system as described in col. 6, lines 8-45, as being necessary to implement the computer implemented method.

As per **claims 2,13,27**, all of the elements of claims 1,12,26, from which the claims depend, are discussed in the rejections of claims 1,12,26 above, wherein the deleting of the information for the block from the RC model are illustrated in Fig. 5, step 112 (see also col. 8, lines 39-47 and col. 9, line 63 to col. 10, line 13).

As per **claims 3-5,10,14-16,28-30**, all of the elements of claims 1,7,12,26, from which the respective claims depend, are discussed in the rejections of claims 1,7,12,26 above, wherein the particular order of flattening the hierarchical design and the different levels of hierarchy being process are also illustrated in Fig. 13, showing a top-down flow, from top blocks to lower blocks (i.e., flattening first hierarchical level first before next hierarchical level) and performing all of the blocks of a particular net or group being selected before going to a different net or group.

As per **claims 6,11,19,24**, all of the elements of claims 1,7,12,20, from which the respective claims depend, are discussed in the rejections of claims 1,7,12,20 above, wherein the storage capacity of the second analysis tool/system is greater than the storage capacity of the first circuit analysis tool is within the scope of the prior art because the flattened file is inherently larger than the hierarchical file and any processing tool/system that processes the larger file (i.e., the flattened file) must necessarily have greater storage or memory capacity than that of the tool/system processing the smaller file (i.e., hierarchical file) in order for the that tool/system to process the required amount of data.

As per **claims 17-18,22-23**, all of the elements of claims 12,20, from which the respective claims depend, are discussed in the rejections of claims 12,20 above, wherein the storage devices for storing logical representation and RC model are also described in col. 6, lines 41-45 (see also col. 6, line 46 to col. 7, line 61) as part of the storage of the computer system for which the circuit design files (i.e., design files, edif file, description file) are stored.

**Remarks**

5. The objection to the disclosure due to the noted informalities are withdrawn in light of Applicant's amendment filed on 6/27/2006, which corrected the informalities.

6. The objections of **claims 12-19,26-30** due to the noted informalities in light of Applicant's amendment filed on 6/27/2006, which corrected the informalities. However, claims 1-33 are newly objected to as given above, as being necessitated by Applicant's amendment to the claims which introduced the new errors.

7. The rejections of **claims 1-33** are rejected under 35 U.S.C. 102(b) as being anticipated by **Taylor et al.** (U.S. Patent No. 5,815,402) are withdrawn in light of Applicant's amendment filed on 6/27/2006, wherein as pointed out by Applicant, **Taylor et al.** failed to particularly teach the new limitations as claimed. However, as given in the new rejection above, as being necessitated by Applicant's amendment, the claimed invention is unpatentable over **Ellis et al.** (U.S. Patent No. 5,831,869).

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Therefore, Applicant is requested herein to consider them carefully in response to this Office Action.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Thursday, 8:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2825

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

**or faxed to:**

571-273-8300



Phallaka Kik

Primary Examiner

September 13, 2006